## **Glossary of Internet Terms**

## **Access Charge**

A fee charged subscribers or other telephone companies by a local exchange carrier -- for the use of its local exchange network facilities.

### **Access Provider**

Company that sells Internet connection. Known variously as Internet Access or Service Providers (ISPs).

### **Backbone**

Set of high speed paths that carry longhaul Internet traffic.

### Bandwidth

Size of the data pipeline. If you increase bandwidth, more data can flow at once.

### Bit

(Binary DigIT) -- The smallest unit of computerized data. *Bandwidth* is usually measured in bits-per-second.

See Also: Bandwidth, Bps, Byte, Kilobyte, Megabyte

## **Bps**

(Bits-Per-Second) -- A measurement of how fast data is moved from one place to another. A 28.8 *modem* can move 28,800 bits per second.

See Also: Bandwidth, Bit

### **Broadband**

High speed Internet service that can provide voice, high-speed data services, video-demand services, and interactive information delivery services.

#### **Browser**

A *Client* program (software) that is used to look at various kinds of Internet resources. See Also: <u>Client</u>, <u>URL</u>, <u>WWW</u>, <u>Netscape</u>, <u>Mosaic</u>, <u>Home Page (or Homepage)</u>

### Byte

A set of Bits that represent a single character. Usually there are 8 Bits in a Byte, sometimes more, depending on how the measurement is being made.

See Also: Bit

### **Cable Converter Box**

Equipment often provided by a cable company in a subscriber's home that allows access or controls interference to cable services.

#### **Cable Television Transmission**

The transmission, usually for a fee, of television signals, including signals that originate at over-the-air television stations, to consumers on a wired network.

### Cellular Mobile Radio Telephone System

Also called "Cellular." A high capacity land mobile telephone system wherein channels assigned to the system are divided among several geographical "cells" covering a defined service area.

## Coaxial Cable (COAX)

A type of cable commonly used in cable television systems which is composed of two concentric conductors: an inner wire, and an outer braided sleeve.

#### Co-location

Most often used to refer to having a *server* that belongs to one person or group physically located on an *Internet*-connected *network* that belongs to another person or group. Usually this is done because the server owner wants their machine to be on a high-speed Internet connection and/or they do not want the security risks of having the server on their own network.

See Also: <u>Internet</u>, <u>Server</u>, <u>Network</u>

#### **Common Carrier**

The term used to describe a telephone company. It is a telecommunications company that is available for hire on a non-discriminatory basis to provide communication transmission services, such as telephone and telegraph, to the public.

#### **Competitive Local Exchange Carriers (CLEC)**

Companies who compete against local phone companies (also called Incumbent Local Exchange Carriers (ILECs) or Regional Bell Operating Companies (RBOCs)) to provide local access service, including voice and/or Internet service. CLECs often use fiber optic networks.

### Convergence

In this context, convergence means that providers of communication systems can deliver products and services that compete with the products and services now delivered by other networks. One example would be a cable company providing local phone service or a local phone company providing video services.

#### Cookie

The most common meaning of "Cookie" on the Internet refers to a piece of information sent by a Web *Server* to a Web *Browser* that the Browser software is expected to save and to

send back to the Server whenever the browser makes additional requests from the Server.

Depending on the type of Cookie used, and the Browser's settings, the Browser may accept or not accept the Cookie, and may save the Cookie for either a short time or a long time.

Cookies might contain information such as login or registration information, online "shopping cart" information, user preferences, etc.

When a Server receives a request from a Browser that includes a Cookie, the Server is able to use the information stored in the Cookie. For example, the Server might customize what is sent back to the user, or keep a log of particular user's requests.

Cookies are usually set to expire after a predetermined amount of time and are usually saved in memory until the Browser software is closed down, at which time they may be saved to disk if their "expire time" has not been reached.

Cookies **do not** read your hard drive and send your life story to the CIA, but they can be used to gather more information about a user than would be possible without them. See Also: Browser, Server

## Cyberspace

Term originated by author William Gibson in his 1984 novel *Neuromancer*. The word Cyberspace is currently used to describe the whole range of information resources available through computer networks.

#### **Dedicated Line**

A communications circuit or channel provided for the exclusive use of a particular subscriber. Dedicated lines are used for computers when large amounts of data need to be moved between points. A phone line or DSL is a dedicated line.

### Digital/Digitized

Any type of information that can be output, transmitted and interpreted as individual bits of binary information (the use of the number 0 and 1), using electrical or electromagnetic signals that can be modulated to convey their specific content.

## **Digital Signing**

Encrypted data appended to a message to identify the sender.

### **Direct Broadcast Satellite (DBS/DISH)**

A high-powered satellite that transmits or retransmits signals which are intended for direct reception by the public. The signal is transmitted to a small earth station or dish (usually the size of an 18-inch pizza pan) mounted on homes or other buildings.

### DSL

(Digital Subscriber Line) -- A method for moving data over regular phone lines. A DSL circuit is much faster than a regular phone connection, and the wires coming into the subscriber's premises are the same (copper) wires used for regular phone service. A DSL circuit must be configured to connect two specific locations, similar to a leased line.

A commonly discussed configuration of DSL allows downloads at speeds of up to 1.544 megabits (not mega*bytes*) per second, and uploads at speeds of 128 kilobits per second. This arrangement is called ADSL: "Asymmetric" Digital Subscriber Line.

Another common configuration is symmetrical: 384 Kilobits per second in both directions.

In theory, ADSL allows download speeds of up to 9 megabits per second and upload speeds of up to 640 kilobits per second.

DSL is now a popular alternative to *Leased Lines* and *ISDN*, being faster than ISDN and less costly than traditional Leased Lines.

See Also: bit, bps, ISDN, Leased Line

#### **Domain Name**

The unique name that identifies an Internet site. Domain Names always have 2 or more parts, separated by dots. The part on the left is the most specific, and the part on the right is the most general.

See Also: <u>IP Number</u>

#### Download (Receive)

To receive data from another computer into your computer. It is also called "receive." the opposite is called "Upload."

### E-mail

E-Mail allows the user to send a message via a computer instantly to one or many person around the world. E-mail users typically have a "mailbox" on a network or a videotext system where other users can send messages to be retrieved by the recipient.

### **Ethernet**

A very common method of networking computers in a LAN. Ethernet will handle about 10,000,000 bits-per-second and can be used with almost any kind of computer.

See Also: Bandwidth, LAN

### **Fiber Optics**

A method for the transmission of information (sound, video, data) in which light is modulated and transmitted over high-purity, hair-thin filaments of glass. The bandwidth capacity of fiber optic cable is much greater than that of copper wire.

#### File

Anything stored on a computer, such as a program, image, or document.

### Fire Wall

A combination of hardware and software that separates a *LAN* into two or more parts for security purposes.

See Also: Network, LAN

## **Footprint**

The area in which a specific transmission can be received. Some footprints cover as much as one-third of the earth, such as satellite or cell systems.

## Gateway

Gateways provide a single source through which users can locate and gain access to a wide variety of computer services. Gateways typically offer a directory of services available through them, and provide billing for these services. Another meaning of gateway is to describe any mechanism for providing access to another system, e.g. AOL might be called a gateway to the Internet.

## **Gigabyte**

1000 or 1024 *Megabytes*, depending on who is measuring.

See Also: Byte, Megabyte

### Hacker

Someone who gets off on breaking through computer security and limitations. A cracker is a criminal hacker.

#### Hit

As used in reference to the World Wide Web, "hit" means a single request from a web *browser* for a single item from a web *server*. "Hits" are often used as a very rough measure of load on a server, e.g. "Our server has been getting 300,000 hits per month." Because each "hit" can represent anything from a request for a tiny document (or even a request for a

missing document) all the way to a request that requires some significant extra processing (such as a complex search request), the actual load on a machine from 1 hit is almost impossible to define.

## **Home Page (or Homepage)**

Several meanings. Originally, the *web* page that your *browser* is set to use when it starts up. The more common meaning refers to the main web page for a business, organization, person or simply the main page out of a collection of web pages, e.g. "Check out so-and-so's new Home Page."

See Also: Browser, Web

### **Home Satellite Dish (HSD)**

A home receiver that permits the consumer to receive existing satellite transmissions.

#### Host

Your Internet access provider's computer. Any computer on a *network* that is a repository for services available to other computers on the *network*. It is quite common to have one host machine provide several services, such as *WWW* and *USENET*.

See Also: Node , Network

### HTML

(HyperText Markup Language) -- The coding language used to create *Hypertext* documents for use on the *World Wide Web*. HTML looks a lot like old-fashioned typesetting code, where you surround a block of text with codes that indicate how it should appear. Additionally, in HTML you can specify that a block of text or a word is linked to another file on the Internet. HTML files are meant to be viewed using a *World Wide Web Client* Program, such as *Netscape* or *Mosaic*.

See Also: Client, Server, WWW

#### HTTP

(HyperText Transfer Protocol) -- The protocol for moving *hypertext* files across the *Internet*. HTTP is the most important protocol used in the *World Wide Web* (*WWW*). See Also: Client, Server, WWW

### **Hypertext**

Generally, any text that contains links to other documents - words or phrases in the document that can be chosen by a reader and which cause another document to be retrieved and displayed.

## **Incumbent Local Exchange Carriers (ILECs)**

Companies that provided local access service, including voice and/or Internet service, as of the date of enactment of the Telecommunications Act of 1996. At the time of enactment, ILECs included the RBOCs (the seven local telephone companies created in 1984 as part of the breakup of AT&T) and GTE. Since passage of the 1996 Act, these eight companies have merged to become four: BellSouth, Verizon, Qwest, and SBC Communications.

## **Information Superhighway**

A term describing a network of integrated telecommunications systems connecting people around the world to information, businesses, governments and each other.

#### Interconnection

The connection of one telecommunication carrier's network to another or the connection of a piece of telephone equipment to the nation-wide telephone network.

#### Interface

The point at which two systems or pieces of equipment are connected.

#### Internet

A computer network stretching across the world that links the user to businesses, government agencies, universities, and individuals. The Internet provides computers with the ability to connect with other computers for communications, disseminating and collecting information.

#### Intranet

A private *network* inside a company or organization that uses the same kinds of software that you would find on the public *Internet*, but that is only for internal use. As the Internet has become more popular, many of the tools used on the Internet are being used in private networks, for example, many companies have web servers that are available only to employees.

See Also: <u>internet</u>, <u>Internet</u>, <u>Network</u>

### **IP** (Internet Protocol)

The most important protocol upon which the Internet is based. Defines how packets of data get from source to destination.

#### **IP Address**

Every computer connected to the Internet has an IP address (written in dotted numerical notation), which corresponds to its domain name. Domain Name Servers convert one to the other.

### **ISDN**

(Integrated Services Digital Network) -- A way to move more data over existing regular phone lines. It is being replaced by DSL technology. It can provide speeds of roughly 128,000 bits-per-second over regular phone lines, but in practice, most people will be limited to 56,000 or 64,000 bits-per-second.

### **ISP**

(Internet Service Provider) -- An institution that provides access to the Internet in some form, usually for money.

See Also: Internet

#### Java

Java is a network-oriented programming language invented by Sun Microsystems that is specifically designed for writing programs that can be safely downloaded to your computer through the Internet and immediately run without fear of viruses or other harm to your computer or files. Using small Java programs (called "Applets"), Web pages can include functions such as animations, calculators, and other fancy tricks.

We can expect to see a huge variety of features added to the Web using Java, since you can write a Java program to do almost anything a regular computer program can do, and then include that Java program in a Web page.

See Also: Applet

## **JavaScript**

JavaScript is a programming language that is mostly used in web pages, usually to add features that make the web page more interactive. When JavaScript is included in an *HTML* file it relies upon the browser to interpret the JavaScript. JavaScript and Java are two different programming languages.

See Also: HTML, Java

#### JPEG.

(Joint Photographic Experts Group) -- JPEG is most commonly mentioned as a format for picture or image files. JPEG format is preferred to the *GIF* format for photographic images, as opposed to line art or simple logo art.

See Also: GIF

## **Kilobyte**

A thousand bytes. See Also: <u>Byte</u>, <u>Bit</u>

## LAN

(Local Area Network) -- A computer network limited to the immediate area, usually the same building or floor of a building.

See Also: Ethernet

#### LATA

(Local Access and Transport Area) A contiguous local exchange area which includes every point served by a local phone company within an existing community of interst. It also serves as the dividing line for the allocation of assets and liabilities between AT&T and the Bell Operating Companies. LATAs were established by the Department of Justice as a result of the AT&T divestiture.

#### **Leased Line**

Refers to a phone line that is rented for exclusive 24-hour, 7 -days-a-week use from your location to another location. The highest speed data connections require a leased line. See Also: <u>T-1</u>, <u>T-3</u>, <u>DSL</u>

#### Link

In hypertext, as in a Web page, a link is a reference to another document. When you click on a link in a browser, that document will be retrieved and displayed, played or downloaded depending on its nature.

#### **Listserv®**

The most common kind of *maillist*, "Listserv" is a registered trademark of L-Soft international, Inc.

See Also: <u>BITNET</u>, <u>E-mail</u>, <u>Maillist</u>

### **Local Loop**

The telephone wire, poles, and other facilities that link your home to the telephone network.

### Login

Noun or a verb. Noun: The account name used to gain access to a computer system. Not a secret (contrast with *Password*).

Verb: The act of entering into a computer system, e.g. *Login to the WELL and then go to the GBN conference*.

See Also: Password

## **Maillist (or Mailing List)**

A (usually automated) system that allows people to send *e-mail* to one address, whereupon their message is copied and sent to all of the other subscribers to the maillist. In this way, people who have many different kinds of e-mail access can participate in discussions together.

## Megabyte

A million *bytes*.

See Also: Byte, Bit, Kilobyte

### Modem

(MOdulator, DEModulator) -- A device that you connect to your computer and to a phone line, that allows the computer to talk to other computers through the phone system. Basically, modems do for computers what a telephone does for humans.

#### MP3

A compressed music format.

#### Narrowband

A term applied to telecommunications facilities capable of carrying only voice, facsimile images, slow-scan video images and data transmissions at "kilobit" speeds. The term is commonly applied to voice-grade analog facilities and to digital facilities operating at low speeds (less than 1.544 Mbps).

#### Network

Any time you connect 2 or more computers together so that they can share resources, you have a computer network.

See Also: <u>Internet</u>, <u>Intranet</u>

### Packet

A unit of data. In data transfer, information is broken into packets, which then travel independently through the Net. An Internet packet contains the source and destination addresses, an identifier, and the data segment.

### **Packet Switching**

The method used to move data around on the *Internet*. In packet switching, all the data coming out of a machine is broken up into chunks. Each chunk has the address of where it came from and where it is going. This enables chunks of data from many different sources to co-mingle on the same lines, and be sorted and directed to different routes by special machines along the way. This way, many people can use the same lines at the same time.

## **Paging System**

One-way mobile radio service where a user carries a small, lightweight minature radio receiver capable of responding to coded signals.

### **Password**

A code used to gain access to a locked system.

See Also: Login

### **Platform**

Computer operating system, such as Mac OS, Windows, or Linux.

PC

Personal computer.

### **POP**

(Point of Presence) A Point of Presence usually means a city or location where a network can be connected to, often with dial up phone lines. So if an Internet company says it will soon have a POP in Belgrade, it means that it will soon have a local phone number in Belgrade and/or a place where leased lines can connect to their network.

#### **Port**

Most generally, a place where information goes into or out of a computer, or both. E.g. the serial port on a personal computer is where a *modem* would be connected.

#### Portal

Usually used as a marketing term to described a Web site that is or is intended to be the first place people see when using the Web. Typically a "Portal site" has a catalog of web sites, a search engine, or both. A Portal site may also offer email and other service to entice people to use that site as their main "point of entry" (hence "portal") to the Web. Examples of "Portals" include Yahoo and msn.com.

### **Posting**

A single message entered into a network communications system. E.g. A single message posted to a message board.

### **PPP**

(Point to Point Protocol) -- Most well known as a protocol that allows a computer to use a regular telephone line and a *modem* to make *TCP/IP* connections and thus be really and truly on the *Internet*.

See Also: Internet, TCP/IP

### **PSTN**

(Public Switched Telephone Network) -- The regular old-fashioned telephone system.

### Reach

"Reach" refers to the availability of a service in the community. It is the number of homes to which the service is available regardless of whether or not residents choose to subscribe.

## **Regional Bell Operating Company (RBOC)**

Any one of the seven local telephone companies created in 1984 as part of the break-up of AT&T. The seven RBOC have since merged to become four: BellSouth, Verizon, Qwest, and SBC.

#### Router

A special-purpose computer (or software package) that handles the connection between 2 or more *networks*. Routers spend all their time looking at the destination addresses of the *packets* passing through them and deciding which route to send them on.

See Also: Network, Packet Switching

#### Satellite

A radio relay station that orbits the earth. A complete satellite communications system also includes earth stations which communicate with each other via the satellite. The satellite receives a signal transmitted by an originating earth station and retransmits that signal to the destination earth station(s). Satellites are used to transmit telephone, television, and data signals originated by common carriers, broadcasters, and distributors of CATV program material.

#### Satellite Carrier

An entity that owns or leases the facilities of a satellite or satellite service to establish and operate a channel of communications for point-to-multipoint distribution of television station signals.

### **Satellite Dish**

A kind of antenna used to pick up transmissions broadcast from a satellite.

### **Search Engine**

Database of Web page summaries that can be searched to find reference to something on the Intern et.

### **Security Certificate**

A chunk of information (often stored as a text file) that is used by the *SSL* protocol to establish a secure connection. Security Certificates contain information about who it belongs to, who it was issued by, a unique serial number or other unique identification, valid dates, and an encrypted "fingerprint" that can be used to verify the contents of the certificate. In order for an SSL connection to be created both sides must have a valid Security Certificate.

See Also: SSL

### Server

A computer, or a software package, that provides a specific kind of service to software running on other computers. The term can refer to a particular piece of software, such as a *WWW* server, or to the machine on which the software is running, e.g. "Our mail server is down today, that's why e-mail isn't getting out."

See Also: Network

## Slamming

The term used to describe what occurs when a customer's long distance service is switched from on long distance company to another company without the customer's permission. Such unauthorized switching violates the Communications Act of 1934, as amended.

### **SMTP**

(Simple Mail Transfer Protocol) -- The main protocol used to send electronic mail on the Internet. Almost all Internet email is sent and received using SMTP. Thus if one wanted to set up an email server on the Internet one would look for email server software that supports SMTP.

## **Spam (or Spamming)**

An inappropriate attempt to use a *mailing list* or other networked communications facility as if it was a broadcast medium (which it is not) by sending the same message to a large number of people who didn't ask for it.

### Spectrum

The range of electromagnetic radio frequencies used in the transmission of sound, data, and television.

### **SSL**

(Secure Sockets Layer) -- A protocol designed by Netscape Communications to enable encrypted, authenticated communications across the Internet. SSL provides 3 important things: Privacy, Authentication, and Message Integrity. In an SSL connection, each side of the connection must have a *Security Certificate*, which each side's software sends to the other. Each side then encrypts what it sends using information from both its own and the other side's Certificate, ensuring that only the intended recipient can de-crypt it, and that the other side can be sure the data came from the place it claims to have come from, and that the message has not been tampered with.

See Also: Browser, Server, Security Certificate, URL

### **Streaming**

Video over the Internet that is delivered in real time instead of waiting for the whole file to arrive, (e.g. RealAudio).

#### Surf

To skip from page to page around the Web by following links.

#### T-1

T-1 is a *leased-line* connection capable of carrying data at 1,544,000 *bits*-per-second. It is becoming replaced by DSL technology in many areas. At maximum theoretical capacity, a T-1 line could move a *megabyte* in less than 10 seconds. That is still not fast enough for full-screen, full-motion video, for which you need at least 10,000,000 bits-per-second. See Also: <u>Bandwidth</u>, <u>Bit</u>, <u>Byte</u>, <u>Ethernet</u>, <u>T-3</u>

#### T-3

A *leased-line* connection capable of carrying data at 44,736,000 bits-per-second. This is more than enough to do full-screen, full-motion video.

See Also: Bandwidth, Bit, Byte, Ethernet, T-1

### TCP/IP

(Transmission Control Protocol/Internet Protocol) -- This is the suite of protocols that defines the *Internet*. To be truly on the *Internet*, your computer must have TCP/IP software.

See Also: <u>IP Number</u>, <u>Internet</u>, <u>UNIX</u>

### **Telecommunications**

Any transmission, emission or reception of signs, signals, writing, images, sounds or intelligence of any nature by wire, radio, optical or other electromagnetic systems.

## **Telephony**

The word used to describe the science of transmitting voice over a telecommunications network.

### Terminal

A device that allows you to send commands to a computer somewhere else. At a minimum, this usually means a keyboard and a display screen and some simple circuitry.

#### **Terminal Server**

A special purpose computer that has places to plug in many *modems* on one side, and a connection to a *LAN* or *host* machine on the other side. Thus the terminal server does the work of answering the calls and passes the connections on to the appropriate *node*.

See Also: LAN, Modem, Host, Node, PPP, SLIP

### **Twisted Pair**

This is the term used to describe the traditional copper cable that is used for short distance communications. The twisted pair is part of the local loop and it is these wire that are enhanced to provide DSL.

## Unbundling

Unbundling is the term used to describe the access provided by local exchange carriers so that other service providers may buy or lease portions of its network elements, such as interconnection loops to serve subscribers.

#### UNIX

A computer operating system (the basic software running on a computer, underneath things like word processors and spreadsheets). UNIX is designed to be used by many people at the same time (it is multi-user) and has *TCP/IP* built-in.

#### URL

(Uniform Resource Locator) -- The standard way to give the address of any resource on the Internet that is part of the World Wide Web (WWW). A URL looks like this:

http://www.matisse.net/seminars.html.
See Also: WWW

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#### **Universal Service**

This term describes the financial support mechanisms that constitute a universal fund which helps compensate telephone companies or other communication entities for providing access to telecommunications services at reasonable and affordable rates throughout the country, including rural, insular, and high cost areas, and to public institutions.

### WAN (Wide Area Network)

## LAN (Local Area Network)

The term **WAN** is used to describe a data network used to interconnect a companies' remote sites, or widely-dispersed computer equipment. The term **LAN** is used to describe a local data network, one that is used to interconnect the computer equipment of a commercial user.

### **Wireless Communication**

Any broadcast or transmission which can be received through microwave or radio frequencies without the use of a cable connection for reception.

## World Wide Web, "The Web," or WWW

Graphic and text documents published in the Internet that are inter-connected through clickable "hypertext" links. A Web page is a single document. A Web site is a collection of related documents.

## Yahoo

The Web's most popular directory at: <a href="http://www.yahoo.com">http://www.yahoo.com</a>

# Zip

PC file compression format that is commonly used to reduce file size for transfer or storage on floppy disks.